

REMARKS

I. Status of the Application

In view of the above amendments and the following remarks, reconsideration of the rejections set forth in the Office Action of September 10, 2010 is respectfully requested.

By this amendment, claims 6 and 67 have been amended and claims 68 and 69 have been added. Claims 6 and 57-69 are now pending in the application. No new matter has been added by these amendments.

II. Request for Continued Examination

A Request for Continued Examination is submitted herewith in accordance with 37 C.F.R. § 1.114. Entry and consideration of the aforementioned amendments is thus respectfully requested.

III. 35 U.S.C. § 112

Claims 6 and 57-67 stand rejected as failing to comply with the enablement requirement, and also as being indefinite, for reciting a sintered compact containing Cu or Cu alloy in an amount of 10 to 95wt% and a residue made of Mo principally, wherein said sintered compact contains Mo in an amount of 35 to 75wt%. The limitation of the percentage of copper or copper alloy has been deleted from claims 6 and 67, and thus it is submitted that the claims are now enabled and definite. Withdrawal of these rejections is respectfully requested.

Claims 6 and 57-67 are also rejected as being indefinite regarding the term “relative density.” While this limitation is clear and definite when read in light of the specification (see MPEP 2173.02 and *Beachcombers v. Wildewood Creative Prods.*, 31 F.3d 1154, 1158 (Fed. Cir.

1994)), and thus clearly satisfies the definiteness requirement of 35 U.S.C. § 112, claims 6 and 67 have been amended in an effort to advance prosecution; these claims now recite the definition of relative density set forth on page 29 of the specification. The meaning of the term “relative density” is now clear from the plain language of the claim itself, and withdrawal of this rejection is thus respectfully requested.

IV. Prior Art Rejections

Currently, claims 6 and 57-67 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Takeshi (JP 08-109450) in view of various other prior art references including Gonia et al. (US 5,780,170), Kawamura et al. (US 5,370,725), and Nakashima et al. (US 5,582,281).

As acknowledged on pages 7 and 8 of the Office Action of January 15, 2010, the Takeshi reference does not disclose the claimed Molybdenum content of 35 to 75wt%; the remaining references of the applied prior art also fail to disclose this feature. The prior art rejection relies on the *In re Aller* precedent for the assertion that this subject matter is an obvious matter of routine optimization (see pages 7 and 8 of the Office Action of January 15, 2010). Additionally, the prior art rejection fails to provide any evidence that the claimed relative density of at least 80% is disclosed in the prior art, or is otherwise obvious. The most recent Office Action relies on these prior art rejections, and Applicants traverse these rejections as provided below.

The MPEP and applicable law are exceedingly clear that “[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.” MPEP 2142 (emphasis added), citing *In re Rinehart*, 531 F.2d 1048 (CCPA

1976). In order to establish a *prima facie* case of obviousness, the Examiner must account for the differences between the claimed subject matter and the applied prior art. *Graham v. John Deere Co. of Kan. City*, 383 U.S. 1, 17 (U.S. 1966) (“differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved...”), reaffirmed in *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (U.S. 2007). Additionally, the Federal Circuit has stated that “rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006); see also *KSR*, 550 U.S. at 418.

Firstly, the prior art rejections in the present application fail to include any explanation or articulated reasoning regarding the relative density of the sintered compact recited in claims 6 and 67, and thus no *prima facie* obviousness has been established with respect to these claims. As set forth above, Applicants are under no burden to submit evidence of nonobviousness until a *prima facie* case of obviousness is established. In view of these deficiencies in the prior art rejection, withdrawal thereof is respectfully requested.

Secondly, result-effectiveness of molybdenum content has not been established in the present application, and thus no *prima facie* obviousness has been established with respect to claims 6 and 67. In the present application, the Examiner merely states “one would expect that altering the ratio of molybdenum to copper would affect the properties of the resulting alloy thereof and thus one would optimize the material weight ratio of copper and molybdenum to optimize such alloy properties” (see page 7 of the Office Action of September 10, 2010); the assertion that modifying the physical composition of an article affects its properties is a truism insufficient to support a conclusion of recognized result-effectiveness. As provided in MPEP

2144.05, result-effectiveness is established by demonstrating that a variable is known to achieve a desired result. For purposes of clarification, the difference between yielding an effect and yielding a desired result is illustrated by the following analogy: putting ethanol in gasoline has the effect of changing the properties of the gasoline such as viscosity or freezing temperature, whereas optimizing the oxygen content of gasoline using ethanol additives has the desired result of reducing carbon monoxide and unburned fuel in the exhaust gas. Asserting merely that adding ethanol to gasoline would be expected to have an effect on its properties is insufficient to establish ethanol content as a result-effective variable, but providing evidence that the prior art recognizes the desired result of reducing harmful emissions does establish result-effectiveness. In the present application, the prior art rejection does not establish that a desired result achieved by modifying molybdenum content is known in the prior art, and thus the factual determination of result-effectiveness has not been established and the Examiner's initial burden of establishing *prima facie* obviousness has not been met. Because *prima facie* case of obviousness has not been established in the present application, Applicants are under no burden to submit evidence of non-obviousness. In view of these deficiencies in the prior art rejection, withdrawal thereof is respectfully requested.

Additionally, it appears as though there would have been no reason to modify any of the prior art of record to yield a configuration which would meet the requirements of claims 6 and 67. It is thus submitted that the invention of the present application, as defined in claims 6 and 67, is not anticipated nor rendered obvious by the prior art, and yields significant advantages over the prior art. Allowance is respectfully requested.

Claims 57-66 and 69 depend, directly or indirectly, from claim 6 and are thus allowable for at least the reasons set forth above in support of claim 6. Claim 68 depends from claim 67 and is thus allowable for at least the reasons set forth above in support of claim 67.

In view of the foregoing amendments and remarks, inasmuch as all of the outstanding issues have been addressed, it is respectfully submitted that the present application is now in condition for allowance, and action to such effect is earnestly solicited. If any issues remain after consideration of the response, the Examiner is invited to telephone the undersigned at the Examiner's convenience.

Respectfully submitted,

Takemori TAKAYAMA et al.

By /Andrew D. St.Clair/

Digitally signed by /Andrew D. St.Clair/
DN: cn=/Andrew D. St.Clair/, o, ou,
email=astclair@wenderoth.com, c=US
Date: 2011-03-09 12:24:16 -05'00'

Andrew D. St.Clair
Registration No. 58,739
Attorney for Applicants

ADS/jjy
Washington, D.C. 20005-1503
Telephone (202) 721-8200
Facsimile (202) 721-8250
March 9, 2011